Patent Application No. 09/734,432

AMENDMENT

In the CLAIMS:

Please amend Claims 1, 3, 5, 10, 12, 13, 16-18.

1. (currently amended) A passive identification system, comprising:

a body part input means for generating an information signal impressed with

characteristics of a body part, wherein the information signal includes one or more

generation errors based on variances of the body part;

an index generation means for dynamically generating one or more indices from

the information signal, wherein the one or more indices are generated by processing

the information signal by selecting only a portion of the information signal such that

generation errors based on variances of the body part are determined to be within

than a pre-determined error level within the selected portion of the information signal

and generating the one or more indices using only the selected portion of the

information signal; and

a linking means to link at least one of said indices to an identity for the body part.

2. (previously presented) The passive identification system of claim 1 wherein

an index from the one or more indices of said index generation means is a function of a

subset of data of the information signal.

Patent Application No. 09/734,432

3. (previously presented) The passive identification system of claim 1 wherein

said index generation means comprises means to generate said one or more indices from

different partial information from said selected portion of the information signal or

transformation of said selected portion of the information signal.

4. (previously presented) The passive identification system of claim 1 wherein

said information signal is an information signal impressed with characteristics of a body

part including a human eye.

5. (currently amended) A private biometric identification system,

comprising:

a body part input means for generating an information signal impressed with

characteristics of a body part, wherein the information signal includes one or more

generation errors based on variances of the body part;

an index generation means for dynamically generating one ore more indices from

the information signal by selecting a only portion of the information signal such that

generation errors based on variances of the body part are determined to be within than a

pre-determined error level within the selected portion of the information signal and

Patent Application No. 09/734,432

generating the one or more indices using only the selected portion of the information

signal;

an information hiding means for hiding at least one index to obtain transformed

biometric templates;

a transmission means for transmitting of at least one transformed biometric

template and index pair; and

a verification means for verifying of transformed biometric template with

template linked by associated index.

6. (original) The private biometric system of claim 5 wherein said information

signal is generated from multiple readings of said body part.

7. (previously presented) The private biometric identification system of claim 5

wherein said information hiding means includes a transformation of said information

signal exclusive-ored with an index.

8. (previously presented) The private biometric identification system of claim 5

wherein said verification means further includes is a hamming weight test.

9. (previously presented) The private biometric identification system of claim 5

wherein said verification means further includes validation for authorization.

Patent Application No. 09/734,432

10. (previously presented) A private biometric information system, comprising:

a body part input means for generating an information signal impressed with

characteristics of a body part;

a transmission means for transmitting one or more indices from an index

generation means to a database, for transmitting a biometric template indexed by said

one or more indices to accept points, and for transmitting transformed biometric

templates generated by an information hiding means to an access point; and

a verification means of said transformed biometric templates.

11. (previously presented) The private biometric identification system of claim

10 wherein said biometric template includes at least one said index composed with said

information signal.

12. (previously presented) The passive identification system of Claim 10

wherein the index generation means includes applying error correcting codes to reduce

errors in the information signal before dynamically generating one or more indices from

the information signal.

Patent Application No. 09/734,432

13. (previously presented) The passive identification system of Claim 12

wherein the error correcting codes include computing roots of a polynomial $\sigma(z)$ over a

Galois Field GF(2^m).

14. (original) The passive identification system of Claim 1 wherein the index

generation means includes dynamically generating one or more indices from the

information signal by generating the one or more indices as hash values using a pre-

determined hashing function on the information signal.

15. (original) The passive identification system of Claim 1 wherein the one or

more indices generated from the information signal cannot be used to reveal information

about the characteristics of the body part included in the information signal.

16. (currently amended) A method for passive biometric identification,

comprising:

generating an information signal impressed with characteristics of a body part,

wherein the information signal includes one or more generation errors based on

variances of the body part;

Patent Application No. 09/734,432

selecting a portion of the information signal such that generation errors based on

variances of the body part are determined to be within than a pre-determined error

level within the selected portion of the information signal;

processing the selected portion of the information signal to remove errors thereby

creating a processed information signal;

dynamically generating one or more indices from the processed information

signal, wherein one or more indices generated from the information signal cannot be used

to reveal information about the body part included in the processed information signal;

obtaining a biometric template using the one or more generated indices, wherein

the biometric template includes an identity for the body part; and

verifying the identity for the body part in the biometric template using the one or

more generated indices.

17. (previously presented) The method of Claim 16 wherein the step of

processing the selected portion of the information signal to remove errors includes

processing the information signal with error correcting codes by computing roots of a

polynomial $\sigma(z)$ over a Galois Field GF(2^m).

18. (previously presented) The method of Claim 16 wherein the step of

dynamically generating one or more indices includes dynamically generating the one or

7 of 14

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Patent Application No. 09/734,432

more indices as hash values using predetermined hashing function on the processed

information signal.

19. (original) The method of Claim 16 wherein the one or more indices generated

from the processed information signal cannot be used to reveal information about the

characteristics of the body part included in the information signal

20. (original) The method of Claim 16 wherein the information signal is an

information signal impressed with characteristics of a body part including a human eye.